

III. REMARKS

Status of the Claims

Claims 1 and 15 are amended. Claims 11 and 16 are allowed. Claims 1, and claims 12-15 and 17-19 are resubmitted for consideration.

Applicant has amended the claims to clarify the novel features of the invention for which protection is sought in this application. These amendments are submitted after final rejection in order to place the claims in condition for allowance or in the alternative to place the claims in better condition for appeal. The Examiner is requested to exercise his discretion and enter these amendments.

Summary of the Office Action

Claims 1, 12-15, and 17-19 stand rejected under 35USC103(a) on the basis of the cited reference Jaing et al., U.S. Patent No. 6,213,651 in view of the reference Brimhall, et al, U.S. Patent No. 6,456,720. The Examiner is respectfully requested to reconsider his rejection in view of the above amendment to the claims and following remarks.

The Invention

Claim 1 states that the components of the electro-optical device are mounted on a set of first and second flat panels, each of which is connected to a third panel by means of a bendable web. The first and second panels are arranged in overlapping parallel relation to each other and the third panel by appropriately folding the bendable web. The resulting module is further described in claim 1, as having adjacent, parallel and

overlapping layers. The method of Claim 15 contains equivalent language. None of the cited references either alone or in combination teach this configuration.

Discussion of the Cited References

The reference Jiang is cited in support of the examiner's rejection based on obviousness. In the system of the cited reference fiber optic transmitter and receiver elements are mounted on two separate parallel boards connected perpendicularly to a base system printed circuit board.

The Examiner agrees that there is no teaching in Jiang of the use of flexible sheets folded to provide multiple parallel overlapping panels, such panels being designed to provide a series of supporting surfaces for electro/optical circuits. The circuit boards 106 and 108 of Jiang are independently mounted in slots 240 on base 205.

In order to remedy the above deficiencies of the teaching of Jiang, the Examiner has cited the reference Brimhall, et al. The system of Brimhall is a hearing aid design which is directed to providing a one size fits all, left or right hand device. Flat substrate 102 is constructed with a series of mounting regions 104-110 extending outward and connected by means of flexible portions, such as 118a. After a sequence of bending operations the mounting regions still extend outward from the substrate in a variety of directions, none of which is overlapping with adjacent panels or the substrate. Contrary to the hearing aid module of Brimhall, the first and second panels of the system of this invention are folded over the third panel on opposite sides to form a three layer assembly which is compact.

The teachings of Jiang and Brimhall are not compatible, as the

packaging goals are significantly different in the two technologies. A person skilled in the art of designing fiber optic transmitters would not investigate hearing aid designs to improve their product. Applicant submits that a combination of the teachings of Jiang and Brimhall to obtain the configuration of the subject invention would not be obvious to one skilled in the art.

The Examiner admits that the reference Brimhall fails to teach that the first, second, and third sheets are positioned in overlapping position. Applicant has further emphasized this feature by indicating that the resulting modules in the subject application have adjacent first, second, and third layers that are parallel, overlapping and connected by said flexible sheet material. This feature facilitates the assembly and fabrication of the electro-optical device of this application.

The examiner dismisses this feature as well known in the art and cites the supporting description of figures 13-17 of Brimhall. Brimhall describes, at great length, the intricacies of its bending operations to obtain a substrate "configured for the receipt of a particular arrangement of hearing device components...." (column 8, lines 64-66). It describes four mounting regions 104, 106, 108, and 110 inter connected by multiple folding regions. The resulting module has no overlapping, parallel layers as described in this invention. The arrangement is for specific application in the fabrication of hearing aids. Hearing aids have unique requirements served by the Brimhall device. There is no indication, whatsoever that overlapping, parallel layers would be feasible or advantageous.

Applicant submits that the fabrication techniques described in the subject application are innovative and not well known. The

examiner's statement to the contrary is not supported by the cited references.

Since there is no apparent support for the Examiner's conclusions, the applicant is at a loss to effectively attack the basis of these conclusions. If such conclusions are based on the Examiner's personal knowledge, then Applicants request an affidavit under 37C.F.R., section 1.107(b) detailing the Examiner's reasoning.

The reference Brimhall at most teaches the use of flexible regions, but it gives no teaching as to how to obtain the configuration of the subject invention. The teaching of Brimhall, therefore, does not remedy the deficiencies of the disclosure of Jiang.

Further there is nothing in either Jiang or Brimhall to indicate that a combination of the complex folded substrate module for a hearing aid would be possible or advantageous in the manufacture of the fiber optic transmitter of Jiang.

The Issue of Obviousness

According to basic tenets of patent law, in order to support an obviousness rejection, there must be some suggestion of the desirability of making the modification, aside from the subject application. The claimed invention must be considered as a whole and the references must suggest the desirability and thus the obviousness of making the modification, the references must be viewed without the benefit of hindsight. (See MPEP sections 706.02(a) and 2141. Applicant submits that the modification of the teachings of Jiang and Brimhall in order to obtain the invention, as described in the claims submitted herein, would not

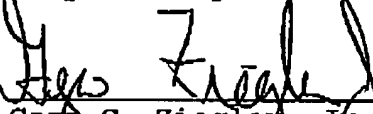
have been obvious to one skilled in the art. There is no indication that such a combination would be desirable.

The above arguments apply equally to claims 1 and 15 and the rejected dependent claims.

In view of the remarks stated above, Applicant submits that all of the claims under consideration contain patentable subject matter and favorable action by the Examiner is respectfully requested. Should any unresolved issues remain, the Examiner is invited to call Applicants' attorney at the telephone number indicated below.

The Commissioner is hereby authorized to charge payment for any fees associated with this communication or credit any over payment to Deposit Account No. 16-1350.

Respectfully submitted,


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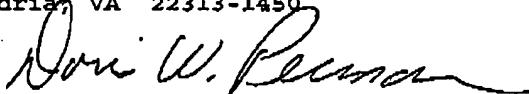
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